

## § 80.271

- (ii) Volume control to adjust the audio output;
  - (iii) Control for dimming any light on the equipment;
  - (iv) Control for switching the auto alarm in and out of operation; and
  - (v) Control to manually reset the auto alarm to muted condition.
- (8) The receiver must operate within specifications throughout the temperature range 0–50 degrees Celsius at relative humidities as high as 95%.
- (9) The receiver must be capable of operating when subjected to vibrations having a frequency between 20 and 30 Hertz and an amplitude of 0.76 mm (0.03 inch) in a direction at an angle of 30 to 45 degrees with the base of the auto alarm.

[51 FR 31213, Sept. 2, 1986, as amended at 58 FR 44952, Aug. 25, 1993; 68 FR 46966, Aug. 7, 2003]

### **§ 80.271 Technical requirements for portable survival craft radiotelephone transceivers.**

(a) Portable survival craft radiotelephone transceivers must comply with the following:

- (1) The transceivers must receive and transmit either on 457.525 MHz or on 156.800 MHz;
- (2) The receiver must comply with the requirements in part 15, subpart C of this chapter and must have a sensitivity of not more than 2 microvolts. The sensitivity requirement must be met using the receiver sensitivity measurement procedure specified in the Radio Technical Commission for Marine Services (RTCM) Special Committee No. 66 Report MMS-R2;
- (3) The effective radiated power of the transmitter must be at least 0.1 watt;
- (4) The transceivers must be battery powered and operate for at least four hours with a transmit to receive ratio of 1:9 with no significant adverse effect upon the performance of the device;
- (5) The transceivers must have a permanently attached waterproof label with the statement “Complies with the FCC requirements for survival craft two-way radiotelephone equipment”; and
- (6) The antenna must be permanently attached to the device or its removal must require the use of a special tool.

## 47 CFR Ch. I (10–1–04 Edition)

(b) Portable radiotelephone transceivers that are already certificated may be used to satisfy the survival craft radiotelephone requirement until October 1, 1993, provided the device meets the technical requirements in paragraphs (a) (1) through (3) of this section.

(c) Survival craft radiotelephone equipment installed after October 1, 1988, must be certificated to meet the requirements of this section.

(d) After October 1, 1993, all portable radiotelephone transceivers that are used to satisfy the survival craft radiotelephone requirement must have been certificated to meet the requirements of this section.

(e) Portable radiotelephone transceivers which are type accepted to meet the requirements of this section must be identified by an appropriate note in the Commission’s database.

[51 FR 31213, Sept. 2, 1986, as amended at 63 FR 36607, July 7, 1998]

### **§ 80.273 Technical requirements for radar equipment.**

(a) Radar installations on board ships that are required by the Safety Convention or the U.S. Coast Guard to be equipped with radar must comply with either the document referenced in paragraph (a)(1) of this section or the applicable document referenced in paragraphs (a)(2) through (4) of this section. These documents contain specifications, standards and general requirements applicable to shipboard radar equipment and shipboard radar installations. For purposes of this part the specifications, standards and general requirements stated in these documents are mandatory irrespective of discretionary language. The standards listed in paragraphs (a)(1), (2), (3), and (4) of this section are incorporated by reference. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of these standards can be inspected at the Federal Communications Commission, 445 12th Street, SW., Washington, DC (Reference Information Center) or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go

## Federal Communications Commission

## § 80.288

to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html). The standards referenced in paragraphs (a)(1), (2), and (3) of this section can be purchased from the Radio Technical Commission for Maritime Services (RTCM), Suite 600, 1800 Diagonal Road, Alexandria, Virginia 22314-2480; telephone 703-684-4481; fax 703-684-4229; email [wtadams@rtcm.org](mailto:wtadams@rtcm.org). The standard referenced in section (a)(4) can be purchased from International Maritime Organization (IMO), Publications, 4 Albert Embankment, London SE1 7 SR, United Kingdom; telephone 011 44 71 735 7611.

(1) Radar installed on or after July 1, 1988, on ships of 500 gross tons and upwards that were constructed on or after September 1, 1984, must comply with the provisions of RTCM Paper 133-87-SC 103-33 including Appendix A. Title: "RTCM Recommended Performance Specification for a General Purpose Navigational Radar Set for Oceangoing Ships of 500 Gross Tons and Upwards for New Radar Installations." Title of Appendix A: "General Purpose Shipborne Navigational Radar Set for Oceangoing Ships Design and Testing Specifications." Document originally approved by RTCM August 15, 1985 and revised May 15, 1987.

(2) Radar installed on ships of 1,600 gross tons and upwards on or before April 27, 1981, must comply with the provisions of Volume II of RTCM Special Committee No. 65 Final Report; Part II. Title: "Performance Specification for a General Purpose Navigational Radar Set for Oceangoing Ships of 1,600 Tons Gross Tonnage and Upwards for Ships Already Fitted." Document approved by RTCM July 18, 1978; effective as FCC requirement on April 27, 1981.

(3) Radar installed on ships of 1,600 gross tons and upwards after April 27, 1981 and before July 1, 1988, must comply with the provisions of Volume II of RTCM Special Committee No. 65 Final Report with Change 1 entered; Part I including Appendix A. Title: "Performance Specification for a General Purpose Navigational Radar Set for Oceangoing Ships of 1,600 Tons Gross Tonnage and Upwards for New Radar In-

stallations." Title of Appendix A: "General Purpose Shipborne Navigational Radar Set for Oceangoing Ships Design and Testing Specifications." Document approved by RTCM July 18, 1978; effective as FCC requirement on April 27, 1981.

(4) Ships between 500 and 1,600 gross tons constructed on or after September 1, 1984, with radar installed before July 1, 1988, must comply with Regulation 12, Chapter V of the Safety Convention and with the provisions of Inter-Governmental Maritime Consultative Organization (IMCO) [now International Maritime Organization] Resolution A.477 (XII). Title: "Performance Standards for Radar Equipment," with Annex. Adopted by IMCO November 19, 1981.

(b) For ships of 10,000 gross tons or more and any other ship that is required to be equipped with two radar systems, each of these systems must be capable of operating independently and must comply with the specifications, standards and general requirements established by paragraph (a) of this section. One of the systems must provide a display with an effective diameter of not less than 340 millimeters (13.4 inches), (16 inch cathode ray tube). The other system must provide a display with an effective diameter of not less than 250 millimeters (9.8 inches), (12 inch cathode ray tube).

(c) Recommendations for tools, test equipment, spares and technical manuals are contained in Part IV of Volume III of the RTCM SC-65 Final Report approved by RTCM July 18, 1978.

[68 FR 46967, Aug. 7, 2003]

### § 80.288 Direction finding and homing equipment.

Each compulsory ship of 1,600 gross tons or over whose keel was laid:

(a) *Prior to May 25, 1980*, must be equipped with radio direction finding apparatus in operating condition and approved by the Commission during an inspection.

(b) *On or after May 25, 1980*, must be equipped with radio direction finding apparatus having a homing capability in accordance with § 80.824.

[51 FR 31213, Sept. 2, 1986, as amended at 63 FR 29960, June 1, 1998. Redesignated at 68 FR 46973, Aug. 7, 2003]